Articles

California's County Hospitals and the University of California Graduate Medical Education System

Current Issues and Future Directions

WENDY J. JAMESON; KATHARINE PIERCE; *and* DENISE K. MARTIN, *Berkeley, California*

California's county hospitals train 45% of the state's graduate medical residents, including 33% of residents in the University of California system. This paper describes the interrelationships of California's county hospitals and the University of California (UC) graduate medical education (GME) programs, highlighting key challenges facing both systems. The mission of California's county health care systems is to serve all who need health care services regardless of ability to pay. Locating UC GME programs in county hospitals helps serve the public missions of both institutions. Such partnerships enhance the GME experience of UC residents, provide key primary care training opportunities, and ensure continued health care access for indigent and uninsured populations. Only through affiliation with university training programs have county hospitals been able to run the cost-effective, quality programs that constitute an acceptable safety net for the poor. Financial stress, however, has led county hospitals and UC's GME programs to advocate for reform in both GME financing and indigent care funding. County hospitals must participate in constructing strategies for GME reform to assure that GME funding mechanisms provide for equitable compensation of county hospitals' essential role. Joint advocacy will also be essential in achieving significant indigent care policy reform.

(Jameson WJ, Pierce K, Martin DK. California's county hospitals and the University of California graduate medical education system—current issues and future directions. West J Med 1998; 168:303–310)

California's public hospitals, also known as county hospitals, have much in common with University of California (UC) medical centers. They both serve multiple missions, which include clinical service, teaching, and research. Both have tertiary specialty centers and provide 24-hour emergency care for the entire community. Both serve significant numbers of Medi-Cal beneficiaries as well as the uninsured and medically indigent. In fact, three of the five UC medical centers function as county hospitals—serving as the major providers of indigent care in their respective communities—and are designated disproportionate share hospitals (DSH), as are virtually all of California's county hospitals. This designation recognizes the considerable amount of both Medi-Cal and charity care provided by these institutions and allows them to receive additional Medicaid dollars. Serving similar populations, with a strong public mission and dependent on similar funding streams, both county hospitals and UC medical centers are struggling with survival in a market place–driven environment.

UC medical centers and county hospitals are the training grounds for a significant number of the state's physicians, nurses, other licensed practitioners, and other medical professionals. County hospitals have become an integral part of the world-renowned UC graduate medical education (GME) system.

County Health and Hospital Systems in California

Background

California's county health care systems, charged by law (Section 17000 of the Welfare and Institutions Code) with the mission of serving all regardless of ability to pay, form the core of the state's health care safety net. They have served California since the 1800s.

In the 1960s, 49 of California's 58 counties operated county hospitals. With the advent of the Medicaid and Medicare programs, health care became more available from private providers. In addition, employer-sponsored health insurance programs expanded, and people became increasingly concentrated in metropolitan areas of the state. Several less-populated counties and a few larger ones contracted out their medical care obligations and closed their county facilities.

While each of California's 58 counties continues to carry out public health functions, in 1996 only 20 of the

From the California Association of Public Hospitals and Health Systems, Berkeley, California.
Reprint requests to Wendy J. Jameson, California Association of Public Hospitals and Health Systems, 2000 Center St, Ste 308, Berkeley, CA 94704.

ABBREVIATIONS USED IN TEXT

DME = direct medical education
DSH = disproportionate share hospitals
GME = graduate medical education
HMO = health maintenance organization
IME = indirect medical education
NAPH = National Association of Public Hospitals

most populous counties directly provided services through county hospital systems (Table 1). Three other metropolitan counties—Orange, Sacramento, and San Diego—have contracted their medical care obligations to UC medical centers. Together, these 23 counties with either a county-governed hospital or a UC hospital contracted to assume that role comprise 80% of the state's population.

County networks of care encompass a full range of health and social services that are crucial to recovering and maintaining healthy lives. Strong links exist between county hospitals and their outpatient primary care clinics, both hospital and community based. County hospital systems are linked to other essential county services, including public health services, mental health and substance abuse services, and a wide range of social services. These integrated systems have long formed an efficient and effective means of serving populations with special needs. Such systems form the basis of evolving Medi-Cal managed care programs.

California's county public health departments protect their communities' health through prevention outreach, disease surveillance, and public safety programs. These efforts include outpatient clinics, childhood immunization programs, communicable disease prevention and treatment programs, and sensitive legal and public safety services including examination and treatment centers for child abuse, sexual assault, and domestic violence.

The health care safety net catches many Californians who are generally not served by the private health care marketplace: the working poor who lack insurance, the medically indigent, the unemployed poor who do not qualify for Medi-Cal, the homeless, legal and undocumented immigrants, the chronically ill and disabled, children with special needs, victims of violence, the mentally ill, migrant farm workers, high-risk mothers and infants, prisoners, substance abusers, persons with limited or no English-speaking abilities, cultural minorities, boarder babies, and persons with communicable diseases, including HIV and tuberculosis.

In addition to medical care, safety net systems have broad experience with and understanding of noneconomic barriers to care—such as language, culture, location, substance abuse, transportation, and lack of primary care physicians—that hinder access to medical care regardless of one's insurance status. County hospital systems have decades of experience serving a patient population that is more than 81% Latino, African American, and Asian.

California's county hospital systems also provide services of vital importance to all persons in their communities—services that are not always available in the private sector. These critical services include trauma centers, burn centers, neurological and spinal cord injury centers, neonatal intensive care units, and disaster and crisis response services. As an example, the burn center at San Bernardino County Medical Center serves as the sole provider to a four-county region. In addition, the trauma center at San Francisco General Hospital is the only one of its kind in this major metropolitan area.

TABLE 1.—*1996 California County Hospitals*

Alameda County
Alameda County Medical Center

Contra Costa County
Merrithew Memorial Hospital & Clinics

Fresno County
Valley Medical Center of Fresno*

Kern County
Kern Medical Center

Los Angeles County
LAC - Harbor+UCLA Medical Center
LAC - High Desert Hospital
LAC - King/Drew Medical Center
LAC - Olive View Medical Center
LAC - Rancho Los Amigos Medical Center
LAC - USC Medical Center

Merced County
Merced Community Medical Center*

Modoc County
Modoc Medical Center

Monterey County
Natividad Medical Center

Riverside County
Riverside General Hospital

*Governance change in 1996

San Bernardino County
San Bernardino County Medical Center

San Francisco County
San Francisco General Hospital
Laguna Honda Hospital & Rehab Center

San Joaquin County
San Joaquin General Hospital

San Luis Obispo County
San Luis Obispo General Hospital

San Mateo County
San Mateo County General Hospital

Santa Clara County
Santa Clara Valley Health & Hospital System

Sonoma County
Community Hospital*

Stanislaus County
Stanislaus Medical Center

Trinity County
Trinity General Hospital

Tuolumne County
Tuolumne General Hospital

Ventura County
Ventura County Medical Center

The numbers are staggering. Although county hospital systems represent only 10% of all the state's hospital beds, they provide:

- 84% of care to the medically indigent in their counties;
- 62% of the state's psychiatric emergency care;
- 38% of the state's Level I trauma centers;
- 37% of hospital-based Medi-Cal outpatient visits and 27% of Medi-Cal inpatient services in their counties; and
- 35% of the state's burn care.

Reductions in Governmental Funding and Increased Marketplace Competition Strain the Health Care Safety Net

In the 1990s, the combination of increased health care market pressures, growing numbers of uninsured people, and declining governmental revenues available to fund health care to the indigent and uninsured has put the pub-

lic health care safety net in great danger. Those providers—county teaching hospitals and UC medical centers—who have traditionally shouldered the burden of caring for the poor, providing costly tertiary services for the community (such as trauma), and serving as the training grounds for medical research and graduate medical education, have been hardest hit by these major shifts.

California is home to a fiercely competitive health care marketplace, dominated by managed care systems in which payers are successfully cutting health care reimbursements. The trend in for-profit mergers and acquisitions of hospitals and health plans will further accelerate competition. This continued squeeze on health care reimbursements and focus on maintaining a positive economic balance sheet leave less and less room for cost-shifting. Private providers are increasingly reluctant to absorb unreimbursed care for the uninsured, the underinsured, and the indigent, as well as the costs of teaching programs.

At the same time as private providers have reduced care to the indigent and uninsured, however, they have increased their share of the Medi-Cal market. In the 1970s and 1980s, as Medi-Cal reimbursement tightened, private providers cut back dramatically on serving those covered by Medi-Cal. This led to an increase in the number of Medi-Cal patients in county hospital systems, and the Medi-Cal reimbursement stream developed into a critical funding base for county hospital systems responsible for underfunded care to growing indigent and uninsured populations. In the 1990s, however, competition for insured patients, including those with Medi-Cal coverage, has increased dramatically, and private providers have successfully attracted many of these patients. In 1991, Medi-Cal inpatient days in county hospitals totaled 1,110,462; in 1996, that number had dropped by 27% to 806,538. This trend has drawn essential Medi-Cal dollars away from county hospitals, eroding this critical funding base for care to the indigent and uninsured.

The shift from a primarily fee-for-service system to a managed care system is also a pressing influence on public teaching hospitals. This influence creates a newly competitive environment for public hospitals that are only now gaining experience with managed care. Capitated reimbursement changes financial incentives and can result in practice patterns that may conflict with the teaching function. The public teaching hospital's dual mission of service and teaching creates greater challenges in terms of efficiency and competitiveness in the new managed care environment. Public teaching hospitals, which serve poorer and sicker patients and can have higher costs, may be less attractive to health maintenance organizations (HMOs). With the exception of safety net contracting mandates on local initiatives, the quasi-public, county-created health plans established to serve Medi-Cal beneficiaries under the two-plan model, managed care organizations have no obligations to offer contracts, ensure sufficient volume, or cover GME costs of public teaching hospitals. In fact, capitation rates do not compensate for indigent care or teaching costs. Finally, for the teaching hospitals that are primarily hospital-based, managed care exerts pressure to expand non–hospital-based primary care networks.

At the same time, the fiscal burden on California's county health care safety net continues, with new and increased demands (including judicial and law enforcement needs) on county funds, along with a steady squeeze on available safety net revenues. Counties have struggled with a property tax shift to balance the state budget of $2.5 billion from 1992 to 1994. California's safety net hospitals have been hit with a 50% decrease since 1989 in Tobacco Tax dollars dedicated to indigent care, and a $218 million shortfall in realignment dollars targeted for indigent care, due to the economic slowdown. Already stretched thin, county hospitals have also seen an erosion in DSH funding because of federal budget cuts and increased interest in the funds by the state and by private hospitals.

Added to this is the fact that increasing numbers of Californians are uninsured—nearly 7 million have no health insurance to cover the cost of illness, accidents, or disease, much less preventive treatments to help keep them healthy and productive. Millions more are underinsured. Recent changes in welfare and immigration reform could add, over the next several years, hundreds of thousands more Californians to the ranks of the uninsured. Moreover, a national report in 1994, which measured health outcomes, health care expenditures, vulnerable populations, and the numbers of uninsured ranked California as the state with the most severe health care problems.[1]

All of these economic and demographic factors are exerting great pressure on the viability of the health care safety net. One response of counties has been the growing trend toward privatization of county medical services, which is taking many forms. In the late 1980s, the county hospital in Shasta County closed with no clear plan for covering care to the indigent, and the loss of inpatient and pharmacy services to the indigent population was never recovered. One study found a significant impact on access to health care and an associated decline in health status as a result of Shasta County's hospital closure.[2] In other counties, such as Fresno, the contract between the county and the private hospital taking over what was previously a county hospital explicitly describes the obligation the hospital will have in caring for the indigent and the county dollars that the hospital will receive in exchange. Similarly, in Los Angeles, the county is contracting with private entities to take over operation of several primary care clinics. Included in these contracts will be explicit agreements relating to care of the indigent. The County of Los Angeles, however, unlike Fresno, will remain a direct provider of medical care services through its other clinics and county hospitals.

All of these significant changes affect county teaching hospitals with whom UC medical centers affiliate as well as the UC medical centers themselves, placing UC GME programs under enormous financial pressures. These pressures have weakened the financial ability of public teaching hospitals both to provide care for the indigent and to support medical training programs.

County Hospitals' Role in Graduate Medical Education

Graduate Medical Education refers to the residency training programs that provide young physicians with the clinical experience necessary for certification and state licensure. Nationally, public hospitals train almost 20% of all physicians in the United States.[3] In California, 45% of the 6,704 residents statewide are trained in public county hospitals (Table 2).

California's county hospital systems have become major providers of GME largely through affiliations with University of California medical centers (see Table 3), although the University of Southern California, Stanford University, and Loma Linda University have GME program affiliations with some county hospitals. California's county hospitals train over 1,400 UC medical residents—*33% of the residents in the entire UC system*—each year. In 1996, these UC-county hospital training programs involved all five UC medical centers and 14 of the 26 county hospitals in California, and they offered a wide range of primary care and specialist training programs. In addition to physicians, hundreds of other health care professionals are trained in county hospitals, including nurses, other licensed practitioners, and medical personnel such as occupational and respiratory therapists.

TABLE 2.—*Graduate Medical Education—Residents Training in California County Hospital Systems (1996)*

County Hospital	Hospital Total			
	Primary: FP	Primary: IM/OB/Peds	Specialty	Total Residents
Alameda	0	50	118	168
Contra Costa	27	0	4	31
Fresno*	38	82	84	204
Kern	12	36	46	94
LA Harbor	33	101	273	407
LA MLK Drew	19	91	193	303
LA USC	18	385	696	1099
Merced*	18	0	0	18
Monterey	21	0	0	21
Riverside	23	27	43	93
San Bernardino	54	7	18	79
San Francisco	29	88	102	219
San Joaquin	21	16	14	51
San Mateo	0	12	15	27
Santa Clara	0	75	12	87
Sonoma*	39	0	0	39
Stanislaus	27	0	0	27
Ventura	39	0	0	39
Total	418	970	1618	3006

Note: The numbers of residents reflect all residents trained in county hospitals, including residents rotating through county facilities from external residency programs.
*Governance change in 1996.
FP = family practice; IM = internal medicine.

GME Partnerships Between County Hospitals and UC Medical Schools: Current and Future Issues

Affiliation Arrangements Between County Hospitals and UC Medical Schools

There are various types of arrangements between county hospitals and UC GME programs. In most arrangements, the UC medical school supplies the faculty who serve as the attending physicians for the residency program at the county hospital. What varies is the degree to which the residency program is independent of the medical school. Harbor-UCLA Medical Center, a county hospital, has its own independent, free-standing residency training programs (separate from UCLA's medical school) with which it is affiliated. For example, both UCLA and Harbor run separate internal medicine residencies. Harbor-UCLA faculty are also UCLA medical school faculty, but Harbor-UCLA hospital's residency programs are run by Harbor. By contrast, Olive View-UCLA Medical Center has no independent residencies but integrates its training with UCLA medical school programs (which is why it is not listed in Tables 2 or 3). Eventually, all residents rotate through both facilities.

UC and County Hospital Partnerships in Graduate Medical Education: Serving the Public Mission

UC/county hospital residency programs provide a range of benefits not only for the residents themselves but for society at large.

Enhancing the Graduate Medical Education Experience. By training in county hospitals, UC residents can gain exposure to much of the trauma and emergency care provided in a community, as well as to specialized services such as burn care and neonatal intensive care. These are essential components of medical training programs that are often not available elsewhere.

Moreover, county hospitals provide a mix of clinical and teaching experience that can be found in no other facilities. The profile of illnesses is broad and complex, as is the ethnic/cultural diversity of the patients. Residents are given a great deal of responsibility for direct patient care, ensuring that they are fully prepared for the medical workforce when they graduate from their residency programs.

Physicians training in the ethnically diverse world of county health and hospital systems gain experience with a wide variety of sociocultural and socioeconomic factors that influence patient disease patterns, treatment regimens, and the physician-patient relationship. Such exposure is invaluable in a state like California, in which more than half the population will be non-white by the turn of the century. UCSF medical school explicitly recognizes the benefit of its relationship with San Francisco General Hospital by rotating certain residents whose training is based at other hospitals through San Francisco General Hospital to enhance their skills in providing culturally competent care.

UC residents in county hospitals also have opportunities to participate in extensive research, especially in certain hospitals such as San Francisco General Hospital and Harbor-UCLA Medical Center. For example, research units on the San Francisco General Hospital campus receive more grants than many medical schools, with funding of approximately $40 million. Ongoing studies focus on such important areas as HIV/AIDS,

TABLE 3.—*University of California Graduate Medical Education—Residents Training in California County Hospital Systems (1996)*

	UC System Affiliated Programs—Number of Residents)				
County Hospital	*Primary: FP*	*Primary: IM/OB/Peds*	*Specialty*	*Total UC System Residents*	*UC Campus Affiliation Detail (Total by Campus)*
Alameda	0	50	49	99	UCSF (50); UCD (49)
Contra Costa	27	0	4	31	UCD (31)
Fresno*	38	82	84	204	UCSF (204)
Kern	12	36	46	94	UCI (12); UCLA (68); UCSD (14)
LA Harbor	29	100	316	445	UCLA (445)
LA MLK Drew†	0	70	100	170	UCLA (170)
Merced*	18	0	0	18	UCD (18)
Monterey	21	0	0	21	UCSF (21)
San Bernardino	54	0	0	54	UCI (54)
San Francisco	29	77	100	206	UCSF (206)
San Joaquin	21	0	0	21	UCD (21)
Sonoma*	39	0	0	39	UCSF (39)
Stanislaus	27	0	0	27	UCD (27)
Ventura	39	0	0	39	UCLA (39)
UC System Total	354	415	699	1468	

Note: The numbers of residents reflect all residents trained in county hospitals, including residents rotating through county facilities from external residency programs.
*Governance change in 1996.
†Data on residency program split estimated.

occupational and environmental medicine, domestic violence, and reproductive sciences.

Providing Access to Primary Care Residency Training. County hospitals play a unique role in offering training sites for primary care residents. Of note, 52% of UC residents who are being trained in county hospitals are in primary care programs, including family practice, general practice, pediatrics, obstetrics/gynecology, and internal medicine. As marketplace forces increase demand for primary care practitioners, county hospitals in California help to meet this need by offering a variety of primary care residencies. Training 35% of UC's primary care residents, these county-based programs form a critical foundation on which the UC system can expand primary care training.

UC medical schools have historically looked to county hospitals for family practice residency affiliations. In fact, although family practice residents represent only 15 percent of all residents trained by the UC system, almost half are trained within county hospital systems. San Bernardino County Medical Center, for example, which trained 54 family practice residents in 1996, has one of the largest family practice residency training programs in the country. The family practice training program at Ventura County Medical Center, established in 1969, has graduated the most family practice physicians of any program in the country.

Finally, county hospitals' unique configuration as part of larger county health systems, with a range of hospital-based and non–hospital-based outpatient clinics, allows them to move residency training programs out of the hospital and into the community as the demands of managed care move the locus of care to such outpatient clinics.

Ensuring Health Care Access for Indigent and Uninsured Populations. The communities served by county hospitals benefit tremendously from UC/county hospital training partnerships. Only through affiliation with university training programs have county hospital and health systems been able to run the cost-effective, quality programs which constitute an acceptable health care safety net for the poor. The residents and faculty form the backbone of county hospital medical staffs, providing untold hours of care to county hospital patients. Without this pool of high-quality, low-cost providers, county hospitals could not afford to provide the level and amount of care they do; the replacement costs would simply be too great. Moreover, teaching programs draw quality primary care and specialty providers into service for low-income and uninsured people by offering faculty appointments and the opportunity for teaching and research. In fact, specialty residents and their supervising physicians in county hospitals constitute the only specialists to which many patients in underserved communities have access.

In order to provide appropriate supervision of residents, county hospitals rely on attending physicians who are faculty members of medical schools. The teaching programs are vital to retaining physicians in these hospitals. When the National Association of Public Hospitals (NAPH) surveyed member hospitals about the impact a reduction in the teaching programs would have on their ability to recruit attending physicians, over 80% indicated that a reduction would significantly affect their ability to recruit physicians. Boston City Hospital responded, "There is no doubt we would lose most of our faculty if we lost our residents. They came here to teach, supervise, and learn, not to be direct care givers in a non-teaching hospital. Nor do we pay them to be the latter." In fact, the average salaries offered to specialty physicians in NAPH teaching hospitals are significantly lower than market salaries.

GME programs also draw residents and faculty to particular communities, some of which are medically underserved. In Ventura County, for example, half of the family

practice physicians practicing in this urban county trained in Ventura County Medical Center, the county hospital.

Practicing in a county hospital can also influence the residents themselves and their future practice of medicine in a way that can benefit society. For example, through exposure to certain kinds of practice, medical students and residents in county hospitals gain the experience that may lead them to choose fields essential to the community, such as family practice or emergency medicine.

A related benefit is the focus of county hospitals on training underrepresented minority health professionals. Results from a survey conducted by NAPH in 1990 showed that 19% of residents trained in NAPH hospitals nationwide were African American, Latino, or a minority other than Asian/Pacific Islander, compared to 11.4% underrepresented minorities among all residents.[3] And studies have shown that African American and other minority physicians are more likely than white physicians to enter primary care specialties, practice in underserved areas, and care for minority patients.[5]

Challenges Facing the UC Medical School/County Hospital GME Partnerships

There is currently more change taking place in the delivery of health services than at any time since the introduction of Medicare and Medicaid. Some key changes include the evolution of managed care, the pooling of purchasers, the reconfiguration of physician practice patterns, and an increased focus on primary and preventive care. These forces are having significant impacts on county hospital systems, the future of GME, and the UC/county hospital partnerships.

For example, as described previously, the communities served by county hospitals have an especially acute need for the direct care provided through GME training programs. Other than in teaching hospitals, few specialists are available in these low-income communities to provide care to low-income populations, especially the uninsured and indigent. Yet the mandate to shift toward more primary care–oriented residencies is likely to result in fewer specialist training programs. Inevitably, the remaining specialist training slots will become even more valuable commodities for which hospitals will compete.

Recognizing that medical education programs must shift from a specialty orientation to one based on primary care, decisions regarding the location and distribution of this substantial public investment in specialty training programs should give consideration to an assessment of community needs and where those resources are the most essential. Ensuring that county hospitals retain key specialty GME programs helps target limited public dollars in a way to provide the greatest investment in the community.

Challenges also arise from increasingly limited resources, intense competition for paying patients and general differences in organizational structures and priorities. For example, in some particularly competitive marketplaces, UC medical centers and county hospitals may find themselves competing for Medi-Cal patients. In these instances, efforts should be made to maximize cooperation and minimize competition. Each institution is struggling in this environment not only to survive but to achieve mutual goals of maintaining access to care for vulnerable populations and preserving quality GME programs, and it is important to recognize the needs and the merits of each partner in this mutual effort.

Another issue that arises when the faculty working in a county hospital are employed by the UC medical center relates to the degree of faculty independence. Questions arise, for example, as to how much risk such physicians can bear under capitation arrangements at the county hospital. As hospitals and their affiliated physicians move into managed care, physicians must be able to enter into risk-sharing arrangements, which will require greater flexibility from both institutions and a great degree of communication and cooperation.

Related to this are the pressures felt by both county hospitals and UC medical centers to lower costs and fit GME into managed care practice modalities. All teaching hospitals must search for ways to redesign training programs to be more aligned with managed care incentives and settings. GME program administrators are struggling to increase productivity as well as decrease costs. UC medical centers and county hospitals must work together to develop reasonable productivity standards and hold residents accountable to those standards, including a close look at increasing the efficiency of clinic-based training programs. These potential changes must be balanced with the need to attract and retain teaching faculty.

A final area that challenges the UC-county hospital partnerships is research. Much of the research in county hospitals is conducted by faculty from UC medical centers. These physicians require support from their employer institutions to allow them to obtain grants and spend research time at the county hospital. Moreover, grant dollars targeted for administrative overhead should be allocated between the county hospital and the UC medical center in a way that reflects the actual expenses borne by each institution.

Policy Changes Needed to Fulfill the Public Mission

As a result of the various changes described previously, funding for both indigent care and GME is severely at risk. As the provision of medical education and indigent care are essential to the public missions of both the UC medical system and California's county hospitals, new public policies are needed.

Graduate Medical Education Financing

As competitive forces intensify, teaching hospitals—both county and UC hospitals—are finding it more difficult to support their graduate medical education and related social missions. Traditionally, teaching hospitals have funded GME through higher charges to all patients for patient care services, and from the special payments built into public payers' reimbursement formulae, most notably through Medicare's direct medical education (DME) payments and indirect medical education (IME)

adjustment. In an increasingly price-competitive market, the higher costs associated with GME reduce the ability of teaching hospitals to compete effectively with other institutions, threatening their ability to support their academic mission in the future.[4]

Both general clinic revenues and special government GME payments are increasingly at risk for teaching hospitals. Teaching hospitals are finding payers unwilling to pay premium prices for direct care services. Managed care organizations and other large purchasers of hospital services are driving hard bargains, and academic medical centers in many areas must either meet the prices community hospitals negotiate with managed care plans (which include no specific financing for teaching) or face loss of access to the very patients required for the teaching programs themselves. In addition, with regard to Medicare, GME payments are part of the capitation paid to managed care organizations and are not necessarily passed on to teaching hospitals.

At the same time, teaching hospitals, including county hospitals, face increased pressure from accrediting bodies, other policy makers, and the market to shift the locus of training and patient care from inpatient to outpatient settings, including locations beyond the hospital clinic settings in which residents traditionally have practiced. While research results to date are inconclusive as to whether training residents in ambulatory settings is more or less costly than training them in inpatient settings, it is clear that there is no DME/IME adjustment for outpatient services.

Only through the national reform of GME funding can California's teaching hospitals continue to succeed in training tomorrow's physician workforce.

Graduate Medical Education Funding Needs Reform

Federal Reform Issues. The value of GME is not generally recognized in the health care marketplace. Increased competition and negotiated rates make cross-subsidization a less viable funding source for GME's costs. In addition, as Medicare—the prime revenue source for GME—evolves to managed care, those dollars are being diverted. The need for adequate explicit reimbursement of these costs thus becomes even more critical.

Special publicly governed funds—dollars not tied directly to payments for patient care services—have been suggested as a potential mechanism for funding future GME costs at the federal level and in some states. Given the rapidly increasing price competition in California, an appropriate policy goal may be to level the competitive playing field through separate support of appropriate training activities to meet the state's medical staffing needs, while allowing teaching hospitals to compete effectively in the clinical care marketplace. For example the "Trust Fund" proposal made in the 1996 Congress would have reimbursed GME costs directly, and spread the burden among *all payers*, not just Medicare. The bipartisan Medicare Payment Advisory Commission, established under section 1805 of the Social Security Act, will likely re-examine the concept of an all-payor trust fund to explicitly fund GME as it develops recommendations for its report to Congress in late 1999.

A more incremental modification that deals only with Medicare as a payor was enacted in the Balanced Budget Act of 1997. Prior to that law, managed care organizations received GME dollars as part of their Medicare capitation rates, called Average Adjusted Per Capita Cost (AAPCC). However, the managed care organizations did not necessarily pass those dollars on to teaching hospitals or contract with teaching hospitals at all. A provision within the Balanced Budget Act carves out GME funds from the AAPCC, extricating these "mission-based" payments from capitation rates and providing them directly to teaching hospitals. This carve-out will be phased in over the next four years.

Because local health care markets are so different, the Association of American Medical Colleges proposed that federal dollars for GME be paid to consortia of providers in a geographic area rather than to individual providers. Each consortium would make decisions about allocation of GME dollars based on resource needs in that local market. In the 1997 Balanced Budget Act, Congress authorized a demonstration project on the use of consortia, whereby a consortium of providers and health plans in a region that meets certain fairly restrictive criteria shall be eligible to receive GME payments that would have been otherwise provided to individual hospitals within that consortium.

State Reform Issues. Unlike the Medicare program, California's Medi-Cal program has never recognized the costs associated with GME. California is one of a few states that do not include some form of reimbursement for GME. However, recent state legislation sponsored by the University of California is a significant step in recognizing these costs and is long overdue. This legislation, enacted in 1997 for 1997–98 and 1998–99 fiscal years, establishes supplemental payment funds for purposes of recognizing medical education costs incurred for services rendered to Medi-Cal beneficiaries by targeted teaching hospitals. The funds were created as part of California's Selective Provider Contracting Program, administered by the California Medical Assistance Commission, which negotiates inpatient payment rates on behalf of the state for contracting hospitals. The funds are voluntarily given by public agencies that meet certain criteria on behalf of the state, which draws down federal matching dollars in accordance with customary Medi-Cal accounting procedures. These additional dollars will then be negotiated between the California Medical Assistance Commission and the targeted teaching hospitals.

In addition, this legislation requires the University of California to work with the state Department of Health Services and the California Medical Assistance Commission to develop a more comprehensive proposal to reform GME that may lead to the development of a federal demonstration project, with implementing legislation to be enacted by June 30, 1999. The scope of the project would include not only teaching and research issues but also the provision of uncompensated care for the state's poor and medically indigent patients, potential changes in the organization and financing of health services including the potential restructuring of Medicare funding for

GME, and a review of the initiatives employed by academic medical centers and their associated health professionals schools to adapt to fiscal constraints.

In any GME financing reform efforts, one of the key priorities must be the needs of low-income communities and assuring access to care in underserved areas and to underserved populations. Whatever strategies are ultimately pursued, it is essential that county hospitals participate in the dialogue and that any new GME funding mechanism provide for equitable compensation of county hospitals' essential role in GME. County hospitals and the UC medical education system must work together in promoting a new GME funding policy that works.

A New Indigent Care Funding Policy Is Needed

As the marketplace becomes more competitive and the incentives to provide indigent care decline, and as DSH funds to county hospitals shrink while the number of uninsured increase, a new indigent care policy is needed at the state and federal levels.

There are a number of avenues that could be pursued to establish an improved system for funding indigent care. The most global strategy, of course, would be to craft a new, state and federal, long-term indigent care program to completely restructure existing indigent care funding sources. Other options aim to redesign certain indigent care funding streams or increase flexibility at a county or state level through waivers. For example, restructuring of the Disproportionate Share Hospital Program to give greater weight for indigent care and to include a GME funding component would go far to correct many of these problems. Another option, which the State of New York has initiated, would be a broad-based provider tax that covers indigent care and GME costs.

Success in achieving any significant indigent care policy reform will depend on broad community support facilitated by both the UC system and California's county hospital systems.

Key Conclusions and Recommendations

By locating physician training programs in county hospitals, UC GME systems provide an invaluable service to local communities as well as to the nation as a whole. The service that they provide—provision of medical services by interns, residents, and faculty to needy populations who rely on county hospitals and health systems for their care—could not be met elsewhere. This partnership affords mutual benefits, giving UC GME residents exposure to a rich learning environment and allowing county hospitals to continue providing essential services to their communities.

This paper has attempted to describe the interrelationships of UC GME programs and county hospitals. It has outlined some of the issues related to the provision of GME in county hospital residency programs, as well as highlighted key policy areas in which the UC system and county hospitals might work together to ensure continued success both in the training of California's future medical workforce as well as the provision of care to vulnerable populations. The following conclusions and recommendation are offered in the spirit of continued dialogue between the two systems.

- A strong link between the UC GME system and public teaching hospitals is essential in an era in which these hospitals are challenged by increasing managed care, the pooling of purchasers, reconfigured physician practice patterns, and declining indigent care funding.
- Despite the mutual benefits of the UC/county hospital partnerships, increasing market competition and, in some cases, different priorities mean that tensions sometimes arise at the local level. UC and county hospitals must commit to clear communication, cooperation, and appreciation for each partner's unique needs and circumstances to resolve these tensions and continue to work toward common goals.
- Specialty-care residency slots will become even scarcer and more valuable as primary care training is emphasized over specialty-care training. Community needs, particularly in underserved areas, must be considered in distributing these specialty training resources, which represent a substantial public investment.
- Provision of medical education and indigent care represent two clear areas for joint advocacy, because they are essential to the missions of both the UC medical system and California's county hospitals.
- GME programs incur additional costs that are not always reimbursed under the current system. National and state reform of GME financing is needed to assure that California's teaching hospitals can continue to compete effectively and support their academic mission in an increasingly price-competitive market. County hospitals must participate in any dialogue over GME financing reform to assure that GME programs continue to support the provision of access to care in underserved areas and among low-income communities.
- A new indigent care policy is needed at the state and federal levels. The marketplace is becoming more competitive, the incentives to provide indigent care are decreasing, disproportionate share funds to county hospitals are shrinking, and the number of uninsured people is increasing. The UC GME system and California's county hospital systems must work together to achieve significant indigent care policy reform.

REFERENCES

1. Lewin-VHI, Inc. Health care problems: variation across states. Fairfax, VA, 1994. Sponsored by the National Institute for Health Care Management.

2. Bindman AB, Keane D, Lurie N. A public hospital closes: impact on patients' access to care and health status. J Am Med Assoc 1990; 264:2899–2904

3. National Association of Public Hospitals. Medical education and patient care in America's urban safety net hospitals: balancing access and reform. Washington, DC: March 1994, pp 4, 9, 12

4. The Lewin Group. Analysis of graduate medical education costs in California: draft final report. Fairfax, VA: July 1996, pp 2, 18

5. United States Department of Health and Human Services, Council on Graduate Medical Education. Improving access to health care through physician workforce reform: directions for the 21st century. Third report. Washington, DC: US Department of Health and Human Services, 1992